
ऊनी एवं वर्स्टेड धागे तथा कपड़े के पैकेजिंग की
रीति संहिता
(तीसरा पुनरीक्षण)

Code for Seaworthy Packaging of
Woollen and Worsted Yarn and Cloth
(Third Revision)

ICS 59.080.20

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FOREWORD

This Indian Standard (Third Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Wool, Wool Products and Textile Floor Coverings Sectional Committee had been approved by the Textiles Division Council.

This standard was first published in 1950 and was revised in 1963 to prescribe the values for dimensions and quantities in metric system. The second revision was undertaken to bring the standard up to date with the co-operation of the Textiles Committee and the Indian Institute of Packaging. In the second revision the use of wax paper and cloth heavy cee was dispensed with. Instead, hessian of light construction namely of 229 g/m² and 380 g/m² was recommended. Hessian laminated with polyethylene film or high density polyethylene woven fabric was also recommended to be used in place of two layers of hessian and polyethylene film. In this revision provision was also made for using wooden or bamboo slats which have been given anti-termite treatment. The maximum gross weight of the bale or case was also recommended to ensure safe transit.

The present revision has been made in the light of experience gained since last revision and to incorporate the following major changes:

- a) Use of Permethrin has been specified as insecticide agent instead of DDT and use of DDT has been dispensed with.
- b) The minimum thickness of polyethylene film has been increased from 75 micron to 100 micron.
- c) The minimum thickness of polyethylene used for lamination of High density polyethylene woven fabric has been increased from 25 micron to 50 micron.
- d) References to Indian Standard given in Annex A has been updated; and
- e) Marking clause has been modified.

The composition of the committee responsible for the formulation of this standard is listed in Annex B.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 2022 'Rules for rounding off numerical values (*second revision*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

*Indian Standard***CODE FOR SEAWORTHY PACKAGING OF WOOLLEN AND
WORSTED YARN AND CLOTH***(Third Revision)***1 SCOPE**

This standard prescribes the procedure of packaging of woollen and worsted yarn and cloth to be exported overseas for their safe transit. The requirements of packing materials have also been specified.

2 REFERENCES

The standards listed in Annex A contain provisions, which through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards listed in Annex A.

3 PACKING MATERIALS

The requirements of the packing materials specified in the standard are given in Table 1.

4 PACKING PROCEDURE**4.1 Yarn (Hanks) in Bales****4.1.1 Make-up of Hanks**

Hanks shall be made into bundles of 5 kg each. The bundles shall be sprinkled with sufficient quantity of Permethrin, Para dichlorobenzene (PDCB) or any other suitable insecticides to ensure protection against attack by insects. Each bundle shall then be wrapped in polyethylene film or put in a bag made of such polyethylene film. The bundles shall be tied at 3 places with jute or cotton twine.

Table 1 Requirements of Packing Materials
(Clause 3.1)

SI No.	MATERIAL	REQUIREMENT
(1)	(2)	(3)
i)	Waterproof paper	Conforming to Type 1 of IS 1398 using craft paper of substance 60 g/m ² and above
ii)	Folding box board	Conforming to IS 1776
iii)	Polyethylene film	Thickness — 100 microns, <i>Min</i> and conforming to Type II of IS 2508
iv)	Hessian (229 g/m ²)	Conforming to Type II of IS 2818
v)	Hessian (380 g/m ²)	Constructional particulars as agreed to between the buyer and the seller
vi)	High density polyethylene woven fabric	Conforming to Table 1 of IS 9755, the fabric shall be laminated with polyethylene of thickness not less than 50 microns
vii)	Cardboard pieces	Thickness — 2 mm, <i>Min</i>
viii)	Wooden or bamboo slats	Width — 4 cm, <i>Min</i> and thickness — 2 cm, <i>Min</i> ; the slats shall be given anti-termite treatment (<i>see</i> IS 401)
ix)	Wooden case	Conforming to class A, Style 3 (b) of IS 1503
x)	Steel strips (for bale packing)	Width — 20 mm, <i>Min</i> and thickness 0.9 mm <i>Min</i> ; the strips shall conform to medium grade of IS 1029 and shall be given one coat of priming red oxide or red lead paint
xi)	Steel strips (for case packing)	Width — 20 mm, <i>Min</i> , thickness — 0.7 mm <i>Min</i> ; the strips shall conform to hard grade of IS 1029

4.1.2 Make-up of Bale

The bale shall satisfy the following requirements:

- a) The sequence of layers is hessian (229 g/m²), polyethylene film and hessian (380 g/m²) in such a way that when the bale is finally made up, the hessian (380 g/m²) forms the outermost layer. A layer of hessian (229 g/m²) laminated with polyethylene film or high density polyethylene woven fabric may be used as an alternate to the first two layers. The packing materials are in sound and dry condition. The overlaps of the outermost layer of hessian are such that they can be properly and securely stitched. The overlaps of the other layers are at least 10 cm;
- b) The lips of end pieces of hessian forming the outermost layer are stitched with 2 strands of jute twine of adequate strength with at least 2 stitches/dm;
- c) The bale is bound by cross hooping the steel strips over cardboard pieces at right angles to both the length and width of bale. The strips nearest to the edges are appearing 13 cm from the respective edges and other strips are equally positioned at approximately 13 cm from each other in the lengthwise direction and 25 cm from each other in the width wise direction. The hoops are in a tight condition when the bale is released from the press;
- d) The gross weight of the bale does not normally exceed 100 kg when the bale is packed; and
- e) Each bale is provided with a pocket for keeping the packing slip.

NOTE — Wooden or bamboo slats of adequate length and strength may be used under the hoops at each of the 8 edges of the bale in place of card board pieces.

4.2 Yarn (Hanks, Cheeses or Balls) in Cases

4.2.1 Make-up of Pieces

The hanks, cheeses or balls shall be sprinkled with sufficient quantity of Permethrin, Paradichlorobenzene (PDCB) or any other suitable insecticides to ensure protection against attack by insects. A sufficient number of hanks, cheeses or balls shall be placed in a bag made of polyethylene film.

4.2.2 Make-up of cases

The cases shall satisfy the following requirements:

- a) The sequence of layers is waterproof paper

and folding boxboard in such a way that when the wooden case is fully packed, the waterproof paper forms the outermost layer. The wrapping materials are in sound, clean and dry condition and are of such size that the overlaps of all layers are at least 10 cm;

- b) The outermost layer is sealed with a suitable waterproof adhesive and the lid firmly nailed to the case;
- c) The case is bound with steel strips in such a way that at least 3 strips are positioned parallel to the battens and at least 2 strips are positioned at right angles to the battens, the strips being in a tight condition; and
- d) The gross weight of the case does not normally exceed 120 kg.

4.3 Cloth in Bales

4.3.1 Make-up of Pieces

Each piece of cloth shall be sprinkled with sufficient quantity of Permethrin, Paradichlorobenzene (PDCB) or any other suitable insecticides so as to ensure protection against attack by insects in case cloth has not already been given mothproof treatment during manufacture. Each piece shall be folded or wrapped on cardboard or strawboard of suitable size and thickness which has previously been covered with Kraft paper. Each piece shall then be wrapped shall then be wrapped with Kraft paper and then with polyethylene film. The edges of the polyethylene film shall be sealed.

NOTE — In case of coarse fabric, Kraft paper for wrapping the pieces may be dispensed with, if felt necessary.

4.3.2 Make up of Bale — The bale shall satisfy the requirements given in 4.1.2.

4.4 Cloth in cases

4.4.1 Make-up of Pieces — The pieces shall be made up as given in 4.3.1.

4.4.2 The cases shall satisfy the following requirements:

- a) The sequence of layers is polyethylene film and waterproof paper in such a way that when the wooden case is fully packed, the polyethylene film forms the outermost layer. The wrapping materials are in sound, clean and dry condition and are of such size that the overlaps of all layers are at least 10 cm;
- b) The outermost layer is sealed with a suitable waterproof adhesive and the lid firmly nailed to the case;

- c) The case is bound with steel strips in such a way that at least 3 strips are positioned parallel to the battens and 2 strips are positioned at right angles to the battens, the strips being in a tight condition; and
- d) The gross weight of the case does not normally exceed 150 kg.

5 MARKING

5.1 Bales or wooden cases shall be marked in indelible ink with the following information:

- a) Name of the material;
- b) Quantity in case of cloth or count in case

of yarn;

- c) Gross weight;
- d) Net weight;
- e) Manufacturer's name, initials or trade-mark; and
- f) Any other information required by the buyer or by the law in force.

5.2 All markings shall be legible and stencilled; writing with hand being not permissible.

5.3 The letters and figures shall be not less than 4 cm in height.

ANNEX A
(Clause 2)

LIST OF REFERRED INDIAN STANDARDS

<i>IS No.</i>	<i>Title</i>	<i>IS No.</i>	<i>Title</i>
IS 401 : 2001	Preservation of timber — Code of practice (<i>fourth revision</i>)	IS 1776 : 1989	Folding box board, uncoated — Specification (<i>first revision</i>)
IS 1029 : 1970	Specification for hot-rolled steel strip (Baling) (<i>first revision</i>)	IS 2508 : 2016	Polyethylene films and sheets — Specification (<i>third revision</i>)
IS 1398 : 1982	Specification for Packing Paper Water Proof, Bitumen — Laminated (<i>second revision</i>)	IS 2818 : 2015	Textiles — Hessian — Specification (<i>third revision</i>)
IS 1503 : 1988	Wooden Packing Cases	IS 9755 : 2021	Textiles — High Density Polyethylene (HDPE)/Polypropylene (PP) Woven Sacks for Packing Fertilizers

ANNEX B
(Foreword)

COMMITTEE COMPOSITION

Wool, Wool Products and Textile Floor Coverings Sectional Committee, TXD 04

<i>Organization</i>	<i>Representative(s)</i>
ICAR - Central Sheep & Wool Research Institute, Avikanagar	DR D. B. SHAKYAWAR (Chairperson)
Agnext Technologies Pvt Ltd, Mohali	SHRI TARANJEET SINGH BHAMARA SHRI SALIL LAKHANPAL (<i>Alternate</i>)
Ahujasons Shawlwale Pvt Ltd, New Delhi	SHRI PUNEET AHUJA
All India Carpet Manufacturers' Association, Bhadohi	SHRI RAVI PATODIA SHRI SURENDA K. BARANWAL (<i>Alternate</i>)
Art Weavers Pvt Ltd, Varanasi	SHRI HUSAIN JAFAR HUSAINI
Bikaner Woolen Mills Pvt Ltd, Bikaner	SHRI SHREYANSH BOTHRA
Carpet Export Promotion Council, New Delhi	SHRI SANJAY KUMAR SHRI SUBODH KUMAR GUPTA (<i>Alternate</i>)
Central Silk Board, Bangalore	DR S. V. NAIK DR PRAKASH N BHATT (<i>Alternate</i>)
Central Wool Development Board, Jodhpur	SHRI ANURAG PUROHIT SHRI RAMESH KUMAR BUNDELA (<i>Alternate</i>)
Crafts Development Institute, Srinagar	DIRECTOR DR HINA QUAZI (<i>Alternate</i>)
Directorate of Animal Husbandry, Jaipur	DR J. S. SEHGAL
Directorate General of Quality Assurance Ministry of Defence, Kanpur	SHRI A. CHOWDHURY SHRI D. K. PUJARI (<i>Alternate</i>)
Export Promotion Council for Handicraft, New Delhi	SHRI RAJESH RAWAT
ICAR - Central Sheep & Wool Research Institute, Avikanagar	DR AJAY KUMAR DR VINOD KADAM (<i>Alternate</i>)
Indian Institute of Carpet Technology, Bhadohi	DR BETTY DASGUPTA DR R. K. MALIK (<i>Alternate</i>)
Indian Institute of Carpet Technology, Srinagar	DR ZUBAIR AHMAD
Indian Institute of Technology, Delhi	PROF R. CHATTOPADHYAY PROF VIJAYKUMAR NARAYANDAS BAHETI (<i>Alternate</i>)
Intertek Private Limited, Gurgaon	SHRI HEMANT PARAB SHRI SANJAY B. KUMAR (<i>Alternate</i>)
Karmabhoomi, Ladakh	SHRI ATUL KUMAR MS K. DOLMA (<i>Alternate</i>)
Khadi & Village Industries Commission, Mumbai	SHRI S. K. SINHA SHRI S. P. GUPTA (<i>Alternate</i>)
Looms of Ladakh, Leh	MS REGZEN YANGDOL
Obeetee Pvt Ltd, Bhadohi	SHRI MAKARAND MEHNDALE SHRI MAYANK JAISWAL (<i>Alternate</i>)

<i>Organization</i>	<i>Representative(s)</i>
Office of the Development Commissioner for (Handicraft), New Delhi	MS POOJA VENUGOPAL SHRI SANDEEP KUMAR PATEL (<i>Alternate</i>)
Office of the Textile Commissioner, Mumbai	SHRI SOURABH KULKARNI SHRI PRANAV PARASHAR (<i>Alternate</i>)
Raymonds Limited, Thane	DR G. S. SINGH SHRI RAJIV HICHKAD (<i>Alternate</i>)
Sher-e-Kashmir University of Agricultural Sciences and Technology, Srinagar	PROF SARFARAZ AHMAD WANI DR ASIF HASSAN SOFI (<i>Alternate</i>)
TAHAFUZ Society, Srinagar	SHRI RAUF WADERA SHRI MOHAMMAD RAFIQ SOFI (<i>Alternate</i>)
Textiles Committee, Mumbai	SHRI J. D. BARMAN SHRI GANESH P. BANGAR (<i>Alternate</i>)
Welspun India, Hyderabad	SHRI SRINATH VANAPARTI
Wool & Woolens Export Promotion Council, New Delhi	SHRI MAHESH N. SANIL SHRI ASHOK KUMAR THAKUR (<i>Alternate</i>)
Wool Research Association, Thane	DR SHISHIR TYAGI SHRI MAYUR BASUK (<i>Alternate</i>)
BIS Directorate General	SHRI J. K. GUPTA, SCIENTIST 'E'/DIRECTOR AND HEAD (TEXTILES) [REPRESENTING DIRECTOR GENERAL (<i>Ex-officio</i>)]

Member Secretary
SHRI HIMANSHU SHUKLA
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